

WHAT IS CLAIMED IS:

1. A process for reading system information from a storage medium in a data storage device in which multiple copies of the system information are stored, the process comprising:

- a) establishing minimal and maximal numbers of read retry attempts, where the minimal number is smaller than the maximal number;
- b) iteratively attempt reading successive copies of the system information until either the system information is successfully read or the system information is not successfully read from any copy of the system information after the minimal number of attempts;
- c) if the system information is not successfully read in step (b), iteratively attempt reading successive copies of the system information until either the system information is successfully read or the system information is not successfully read from any copy of the system information after the maximal number of attempts.

2. The process of claim 1, further including:

- d) if the system information is successfully read or if the system information is not successfully read in step (c), ending the process.

3. The process of claim 1, wherein the attempt to read the system information of step (b) is performed on each copy of the system information successively up to the minimal number of attempts.

4. The process of claim 3, wherein the attempt to read the system information of step (c) is performed on each copy of the system information successively up to the maximal number of attempts.

5. The process of claim 4, further including:

- d) if the system information is successfully read or if the system information is not successfully read in step (c), ending the process.

6. The process of claim 3, further including:

- d) if the system information is successfully read or if the system information is not successfully read in step (c), ending the process.

7. A computer useable medium having a computer readable program embodied therein for addressing data to attempt to read system information from a storage medium in a data storage device in which multiple copies of the system information are stored, the computer readable program comprising:

first computer readable program code for causing the computer to establish minimal and maximal numbers of read retry

attempts, where the minimal number is smaller than the maximal number;

second computer readable program code for causing the computer to iteratively attempt to read successive copies of the system information until either the system information is successfully read or the system information is not successfully read from any copy of the system information after the minimal number of attempts;

third computer readable program code for causing the computer to respond to an unsuccessful reading of the system information by the second program code to cause the computer to iteratively attempt to read successive copies of the system information until either the system information is successfully read or the system information is not successfully read from any copy of the system information after the maximal number of attempts.

8. The computer useable medium of claim 7, further including:

fourth computer readable program code for causing the computer respond to successful reading of the system information to cause the computer to end reading attempts, and

fifth computer readable program code for causing the computer to respond to unsuccessful reading of the system information by the computer in response to

execution of the third program code to cause the computer to end reading attempts.

9. The computer useable medium of claim 7, wherein the attempt to read the system information performed by the computer by the second program code is performed on each copy of the system information successively up to the minimal number of attempts.

10. The computer useable medium of claim 9, wherein the attempt to read the system information performed by the computer by the third program code is performed on each copy of the system information successively up to the maximal number of attempts.

11. The computer useable medium of claim 10, further including:

fourth computer readable program code for causing the computer respond to successful reading of the system information to cause the computer to end reading attempts, and

fifth computer readable program code for causing the computer to respond to unsuccessful reading of the system information by the computer in response to execution of the third program code to cause the computer to end reading attempts.

12. The computer useable medium of claim 9, further including:

fourth computer readable program code for causing the computer respond to successful reading of the system information to cause the computer to end reading attempts, and

fifth computer readable program code for causing the computer to respond to unsuccessful reading of the system information by the computer in response to execution of the third program code to cause the computer to end reading attempts.

13. A disc drive storage device comprising:

a storage medium for storing data including multiple copies of the system information;

a processor; and

firmware defining a computer readable program that causes the processor to attempt to read the system information from the storage medium, the firmware comprising:

first program code for causing the processor to establish minimal and maximal numbers of read retry attempts, where the minimal number is smaller than the maximal number;

second program code for causing the processor to iteratively attempt to read successive copies of the system information until either the system information is successfully read or the system information is not successfully read from any

copy of the system information after the minimal number of attempts;

third program code for causing the processor to respond to an unsuccessful reading of the system information by the second program code to cause the processor to iteratively attempt to read successive copies of the system information until either the system information is successfully read or the system information is not successfully read from any copy of the system information after the maximal number of attempts.

14. The disc drive storage device of claim 13, wherein the attempt to read the system information performed by the processor by the second program code is performed on each copy of the system information successively up to the minimal number of attempts.

15. The disc drive storage device of claim 14, wherein the attempt to read the system information performed by the processor by the third program code is performed on each copy of the system information successively up to the maximal number of attempts.

16. The disc drive storage device of claim 13, wherein the attempt to read the system information performed by the processor by the third program code is performed on each copy of the system information successively up to the maximal number of attempts.

17. The disc drive storage device of claim 13, wherein the storage medium includes a plurality of sectors and the multiple copies of the system information is stored in predetermined sectors.

18. The disc drive storage device of claim 13, wherein the firmware further includes:

fourth program code for causing the processor respond to successful reading of the system information to cause the processor to end reading attempts, and

fifth computer readable program code for causing the processor to respond to unsuccessful reading of the system information by the processor in response to execution of the third program code to cause the processor to end reading attempts.

19. The disc drive storage device of claim 18, wherein the attempt to read the system information performed by the processor by the second program code is performed on each copy of the system information successively up to the minimal number of attempts and the attempt to read the system information performed by the processor by the third program code is performed on each copy of the system information successively up to the maximal number of attempts.

20. The disc drive storage device of claim 18, wherein the storage medium includes a plurality of sectors and the multiple copies of the system information is stored in predetermined sectors.